



Water-Data Report 2008

0209768310 B. EVERETT JORDAN LAKE AT BUOY 12 AT FARRINGTON, NC

Cape Fear Basin
Haw Subbasin

LOCATION.--Lat 35°47'56", long 79°00'21" referenced to North American Datum of 1983, Chatham County, NC, Hydrologic Unit 03030002, .02 mi above Secondary Road 1008, and 0.2 mi east of Farrington.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1992 to current year.

REMARKS.--Station operated to define water quality as part of a regional surface-water quality assessment. Samples for nutrient, chlorophyll *a*, and pheophytin *a* analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique. Prior to October 1, 2005, samples for chlorophyll *a* were analyzed using a high-performance liquid chromatography method.

0209768310 B. EVERETT JORDAN LAKE AT BUOY 12 AT FARRINGTON, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 1 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Time	Sample medium and type	Color, water, filtrd, Pt-Co units (00080)	Sam- pling depth, meters (00098)	Trans- parency Secchi disc, meters (00078)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)
Oct									
17...	0830	Surface water, regular	60	1.0	.30	761	6.9	76	7.8
17...	0831	<i>QC - Surface water, replicate</i>	50	1.0	--	--	--	--	--
17...	0835	Surface water, regular	--	2.0	--	761	4.1	45	7.3
17...	0840	Surface water, regular	--	3.0	--	761	2.3	25	7.2
Dec									
06...	0930	Surface water, regular	--	.80	.40	--	--	--	--
06...	0935	Surface water, regular	40	1.0	--	763	10.4	88	7.7
06...	0940	Surface water, regular	--	2.0	--	763	10.3	88	7.7
06...	0945	Surface water, regular	--	3.0	--	763	10.3	87	7.7
Feb									
26...	0930	Surface water, regular	--	1.2	.60	--	--	--	--
26...	0935	Surface water, regular	25	1.0	--	750	11.4	102	7.8
26...	0940	Surface water, regular	--	2.0	--	750	10.7	95	7.5
26...	0945	Surface water, regular	--	4.0	--	750	3.8	34	7.3
Apr									
23...	0915	Surface water, regular	--	1.0	.50	--	--	--	--
23...	0920	Surface water, regular	50	1.0	--	760	8.4	89	7.2
23...	0925	Surface water, regular	--	3.0	--	760	8.3	88	7.2
23...	0930	Surface water, regular	--	5.0	--	760	7.5	79	7.1
Jun									
19...	0930	Surface water, regular	--	1.4	.70	--	--	--	--
19...	0935	Surface water, regular	50	1.0	--	757	7.4	96	8.1
19...	0940	Surface water, regular	--	2.0	--	757	6.9	90	7.9
19...	0945	Surface water, regular	--	4.0	--	757	2.0	25	7.0
Aug									
06...	1230	Surface water, regular	--	1.2	.60	--	--	--	--
06...	1235	Surface water, regular	50	1.0	--	756	4.2	56	7.2
06...	1240	Surface water, regular	--	2.0	--	756	3.9	52	7.2
06...	1245	Surface water, regular	--	4.0	--	756	.1	2	7.0

0209768310 B. EVERETT JORDAN LAKE AT BUOY 12 AT FARRINGTON, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Specif-ic conduc-tance, wat unf μS/cm		Hard-ness, water, mg/L as CaCO ₃		Magnes-ium, water, mg/L (00915)		Potas-sium, water, mg/L (00925)		Sodium, water, mg/L (00935)		ANC, wat unf infl pt titr., mg/L as CaCO ₃ (00419)		Bicar-bonate, wat unf infl pt titr., mg/L as CaCO ₃ (00450)		Chlor-ide, water, mg/L (00940)		Fluor-ide, water, mg/L (00950)		Silica, water, mg/L as SiO ₂ (00955)		Sulfate water, mg/L (00945)	
	25 degC (00095)	Temper-ature, water, deg C (00010)	water, mg/L as CaCO ₃	water, mg/L (00900)	water, mg/L (00915)	water, mg/L (00925)	water, mg/L (00935)	water, mg/L (009419)	water, mg/L (00450)	water, mg/L (00940)	water, mg/L (00950)	water, mg/L (00955)	water, mg/L (00945)									
Oct																						
17...	242	20.3	39	10.0	3.39	5.59	33.1	45	55	25.2	.34	3.59	23.5									
17...	--	--	39	10.2	3.39	5.62	33.0	44	54	25.1	.33	3.56	23.2									
17...	259	20.0	--	--	--	--	--	--	--	--	--	--	--									
17...	265	19.9	--	--	--	--	--	--	--	--	--	--	--								24.6	
Dec																						
06...	--	--	--	--	--	--	--	--	--	--	--	--	--									
06...	244	8.4	40	10.4	3.49	5.38	32.2	42	51	24.8	.33	3.39	30.4									
06...	244	8.4	--	--	--	--	--	--	--	--	--	--	--									
06...	244	8.4	--	--	--	--	--	--	--	--	--	--	--								30.2	
Feb																						
26...	--	--	--	--	--	--	--	--	--	--	--	--	--									
26...	214	9.9	36	9.06	3.16	4.59	27.6	42	52	22.6	.25	.79	26.1									
26...	221	9.5	--	--	--	--	--	--	--	--	--	--	--									
26...	226	9.5	--	--	--	--	--	--	--	--	--	--	--								27.6	
Apr																						
23...	--	--	--	--	--	--	--	--	--	--	--	--	--									
23...	158	18.1	31	7.79	2.79	3.36	16.9	29	35	15.4	.16	1.59	19.0									
23...	158	18.1	--	--	--	--	--	--	--	--	--	--	--									
23...	160	17.9	--	--	--	--	--	--	--	--	--	--	--								19.0	
Jun																						
19...	--	--	--	--	--	--	--	--	--	--	--	--	--									
19...	198	28.5	37	9.33	3.31	4.22	20.9	40	48	17.6	.23	.28	18.5									
19...	197	28.3	--	--	--	--	--	--	--	--	--	--	--									
19...	188	27.4	--	--	--	--	--	--	--	--	--	--	--								18.3	
Aug																						
06...	--	--	--	--	--	--	--	--	--	--	--	--	--									
06...	188	30.4	36	9.22	3.05	4.24	21.2	39.0	47.6	16.4	.24	4.82	17.0									
06...	187	30.1	--	--	--	--	--	--	--	--	--	--	--									
06...	198	28.8	--	--	--	--	--	--	--	--	--	--	--								15.0	

0209768310 B. EVERETT JORDAN LAKE AT BUOY 12 AT FARRINGTON, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Residue on evap. 180degC wat flt	Ammonia + org-N, water, mg/L (70300)	Ammonia + water, fltrd, mg/L (00625)	Nitrate + nitrite water, fltrd, mg/L (00608)	Nitrite water, fltrd, mg/L (00631)	Ortho- phosphate, water, fltrd, mg/L (00613)	Phos- phorus, water, unfltrd, mg/L (00671)	Organic carbon, water, fltrd, mg/L (00665)	Organic carbon, water, unfltrd, mg/L (00681)	Chloro- phyll a, phyto- plankton, fluoro-, mg/L (70953)	Pheo- phytin a, phyto- plankton, μg/L (62360)	Alum- inum, water, unfltrd recover- able, μg/L (01105)	Arsenic water, unfltrd μg/L (01002)
Oct													
17...	141	1.3	E.018	<.016	<.002	E.005	.112	7.3	12.8	57.5	27.3	201	.85
17...	147	1.4	E.016	<.016	E.001	E.005	.110	7.3	12.7	56.8	29.4	--	--
17...	--	1.5	E.016	<.016	E.001	E.004	.136	--	--	--	--	--	--
17...	--	1.4	.050	<.016	E.002	.006	.151	7.3	--	--	--	--	--
Dec													
06...	--	1.2	.092	.173	.012	E.004	.098	--	--	33.9	32.4	--	--
06...	151	--	--	--	--	--	--	7.1	10.6	--	--	--	--
06...	--	1.2	.091	.170	.012	E.003	.091	--	--	--	--	--	--
06...	--	1.0	.094	.172	.012	E.004	.157	7.1	--	--	--	--	--
Feb													
26...	--	1.1	.032	.435	.009	<.006	.081	--	--	38.2	24.8	--	--
26...	130	--	--	--	--	--	--	6.7	10.6	--	--	--	--
26...	--	1.1	.086	.456	.010	<.006	.089	--	--	--	--	--	--
26...	--	1.3	.130	.460	.010	<.006	.099	6.8	--	--	--	--	--
Apr													
23...	--	.99	E.013	<.016	E.001	E.004	.095	--	--	43.0	22.0	--	--
23...	112	--	--	--	--	--	--	8.2	11.1	--	--	327	.63
23...	--	1.0	E.019	E.008	E.002	E.004	.094	--	--	--	--	--	--
23...	--	1.1	.035	E.010	E.002	E.004	.140	8.3	--	--	--	--	--
Jun													
19...	--	.92	<.020	<.016	<.002	<.006	.067	--	--	28.4	17.7	--	--
19...	129	--	--	--	--	--	--	9.5	11.9	--	--	--	--
19...	--	.91	<.020	<.016	<.002	<.006	.064	--	--	--	--	--	--
19...	--	.82	<.020	<.016	<.002	<.006	.064	9.0	--	--	--	--	--
Aug													
06...	--	.91	E.011	<.016	<.002	E.005	.075	--	--	24.4	15.2	--	--
06...	115	--	--	--	--	--	--	8.5	10.7	--	--	--	--
06...	--	.92	E.012	<.016	<.002	.007	.072	--	--	--	--	--	--
06...	--	1.3	.321	<.016	<.002	.025	.153	8.5	--	--	--	--	--

0209768310 B. EVERETT JORDAN LAKE AT BUOY 12 AT FARRINGTON, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Cadmium water, unfltrd (01027)	Chromium, water, unfltrd (01034)	Cobalt water, unfltrd (01037)	Copper, water, unfltrd (01042)	Iron, water, unfltrd (01045)	Lead, water, unfltrd (01051)	Manganese, water, unfltrd (01055)	Mercury, water, fltrd, (71890)	Mercury, water, unfltrd (71900)	Molybdenum, water, unfltrd (01062)	Nickel, water, unfltrd (01067)	Selenium, water, unfltrd (01147)	Silver, water, unfltrd (01077)
Oct													
17...	.02	E.37	.36	<1.2	487	.56	249	<.010	E.008	9.6	1.1	.21	<.02
17...	--	--	--	--	484	--	236	<.010	.016	--	--	--	--
17...	--	--	--	--	585	--	266	--	--	--	--	--	--
17...	--	--	--	--	772	--	319	<.010	E.010	--	--	--	--
Dec													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	406	--	238	<.010	<.010	--	--	--	--
06...	--	--	--	--	406	--	237	--	--	--	--	--	--
06...	--	--	--	--	474	--	236	<.010	<.010	--	--	--	--
Feb													
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	308	--	101	<.010	<.010	--	--	--	--
26...	--	--	--	--	409	--	129	--	--	--	--	--	--
26...	--	--	--	--	571	--	171	<.010	<.010	--	--	--	--
Apr													
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	<.01	.54	.38	2.4	665	.74	123	<.010	.012	2.2	1.3	.17	<.02
23...	--	--	--	--	655	--	113	--	--	--	--	--	--
23...	--	--	--	--	1,280	--	209	<.010	.012	--	--	--	--
Jun													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	256	--	134	<.010	<.010	--	--	--	--
19...	--	--	--	--	248	--	139	--	--	--	--	--	--
19...	--	--	--	--	249	--	198	<.010	<.010	--	--	--	--
Aug													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	269	--	221	<.010	E.010	--	--	--	--
06...	--	--	--	--	255	--	215	--	--	--	--	--	--
06...	--	--	--	--	912	--	1,480	<.010	E.008	--	--	--	--

0209768310 B. EVERETT JORDAN LAKE AT BUOY 12 AT FARRINGTON, NC—Continued

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO
SEPTEMBER 2008**

Part 5 of 5

[QC, quality control sample. Remark codes:
<, less than; E, estimated.]

Date	Zinc, water, unfltrd recover -able, μg/L (01092)	Data base number	Medium code
Oct			
17...	2.8	01	WS
17...	--	04	<i>WSQ</i>
17...	--	01	WS
17...	--	01	WS
Dec			
06...	--	01	WS
06...	--	01	WS
06...	--	01	WS
06...	--	01	WS
Feb			
26...	--	01	WS
26...	--	01	WS
26...	--	01	WS
26...	--	01	WS
Apr			
23...	--	01	WS
23...	3.4	01	WS
23...	--	01	WS
23...	--	01	WS
Jun			
19...	--	01	WS
19...	--	01	WS
19...	--	01	WS
19...	--	01	WS
Aug			
06...	--	01	WS
06...	--	01	WS
06...	--	01	WS
06...	--	01	WS